

**FILTER FOR PURIFYING AIR AND KEEPING CLEANLY THE  
DUCTS OF A HOT AIR SYSTEM OR CENTRAL AIR  
EXCHANGER.**

**BACKGROUND OF THE INVENTION:**

**1) Field of the invention:**

The present invention relates to a device for purifying air and keeping cleanly the ducts of a hot air system or central air exchanger, and more particularly to a filter that takes automatically the shape of the inlet from a duct when it is installed, and which is held in place by a spring means.

**2) Description of the related art:**

A search of prior art records has unveiled the following United States patents:

1. US 4,804,392 issued in 1989 to Spengler;
2. US 4,552,657 issued in 1985 to Ogawa; and
3. US 4,666,531 issued in 1987 to Minard.

The patents to Spengler, Ogawa and Minard are probably the most relevant.

It is known to use different conical filters in order to purify air and

keep cleanly the ducts of a hot air system or central air exchanger.

At present, one disadvantage of using conical filters is that none of them takes automatically the shape of the inlet from a duct when it is installed.

The gist of the invention is therefore to provide a filter that takes automatically the shape of the inlet from a duct for hot air system or central air exchanger when it is installed, and which allows to purify air and keep cleanly the ducts.

#### **SUMMARY OF THE INVENTION:**

In its simplest form, the use of the filter of this invention is that it takes automatically the shape of the inlet from a duct when it is installed, and which is held in place by a spring means.

#### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S):**

Figure 1 is a perspective view of a filter that takes automatically the round shape of the inlet from a duct, and which is held in place by a spring means.

Figure 2 is an exploded view thereof.

Figure 3 is a perspective view of same filter that takes automatically

the square shape of the inlet from the duct, and which is held in place by a spring means.

Figure 4 is an exploded view thereof.

Figure 5 is a perspective view of same filter that takes automatically the rectangular shape of the inlet from the duct, and which is held in place by a spring means.

Figure 6 is an exploded view thereof.

#### **DETAILED DESCRIPTION OF THE INVENTION:**

Referring to the figures 1 to 6, it may be seen that the filter (1) of the present invention is used for purifying air and keeping cleanly the ducts of a hot air system or central air exchanger, which takes automatically the shape of the inlet from a duct when it is installed, and wich is held in place by a spring means (2)(3).